

### **DETAILED ACTION**

1. This action is issued in response to applicant's RCE filed October 06, 2010.
2. Claims 1-11, 21-34, and 36-38 are presented. No claim added and claims 12-20 and 35 are cancelled.
3. Claims 1-11, 21-34, and 36-38 are pending.

### ***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 06, 2010 has been entered.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11, 21-34, and 37-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In particular, claims 1-11, 21-34, and 37-38 are directed towards an apparatus that comprises a suggestion

database processor, which appears to be a software entity. The claims do not appear to contain any hardware capabilities, thus appearing to be no more than software per se. The claims lack the necessary physical articles to constitute a machine or manufacture within the meaning of 35 USC 101; therefore, the claimed subject matter does not meet the required statutory basis.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 21, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional November 16, 2000, further in view of Hendricks (US Patent No. 5,798,785) filed December 2, 1993.**

Regarding Claims 1, 21, and 36, Balogh discloses an apparatus, comprising:

a content metadata crawler configured to search metadata related to content and to produce a metadata list based on the search (column 3, lines 2-10

and column 10, lines 22-28, Balogh), wherein the metadata list comprises a plurality of metadata elements (Fig.3, item 262, Balogh),

a suggestion keyword indexer communicatively coupled to the content metadata crawler, wherein the suggestion keyword indexer is configured to receive the metadata list and index the metadata elements (Fig.6; columns 8-9, lines 64-67 and 1-9, respectively, Balogh);

a suggestion database communicatively coupled to the suggestion keyword indexer and configured to store the indexed metadata elements (column 9, lines 9-14, Balogh); and

a suggestion database processor communicatively coupled to the content metadata crawler, the suggestion keyword indexer and the suggestion keyword database (column 4, lines 14-22, Balogh).

However, Balogh is not as detailed with respect to the content being aggregated from the plurality of media sources.

On the other hand, Dudkiewicz discloses the content is being aggregated from the plurality of media sources (column 14, lines 39-67, Dudkiewicz)<sup>1</sup>.

Balogh and Dudkiewicz are analogous art because they are from the same field of endeavor of the identification of programming events of interest to a viewer. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Dudkiewicz's teachings into the Balogh system. A skilled artisan would have been motivated to combine as suggested by Dudkiewicz at

column 3, lines 47-56, in order to producing evaluations which reflect an actual users preferences more accurately, and further matching and ranking programs based on viewer preferences. As a result, provide intelligence in receiving and recording devices for identifying programs of interest on behalf of the user.

While Dudkiewicz discusses allowing users to search and producing a keyword list based upon the search (col.1, lines 50-52 and col.12, lines 1-5); however, Balogh and Dudkiewicz are not as detailed with respect to receiving a message containing a first set of one or more search request criteria and produce a list of keywords, wherein receiving the message causes the suggestion database processor to: create a second set of one or more search request criteria by modifying the first set of search criteria with the produced list of keywords, and initiate a search of the suggestion database using the second set of search request criteria.

On the other hand, Hendricks discloses receiving a message containing a first set of one or more search request criteria and produce a list of keywords (column 3, lines 10-17, Hendricks), wherein receiving the message causes the suggestion database processor to: create a second set of one or more search request criteria by modifying the first set of search criteria with the produced list of keywords, and initiate a search of the suggestion database using the second set of search request criteria (columns 32-33, lines 47-67 and 1-13, respectively, Hendricks). It would have been obvious to one of ordinary skill in the art at the

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<sup>1</sup> Examiner Notes: The plurality of media sources corresponds to video, television, and personal digital

time of the invention to incorporate Hendricks' teachings into the Balogh and Dudkiewicz system. A skilled artisan would have been motivated to combine in order to more quickly and efficiently locate the most relevant content.

Regarding Claim 34, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, disclose the apparatus further comprising a search request processor configured to perform the search of the suggestion database using the second set of search request criteria (column 32, lines 47-67, Hendricks).

Regarding Claim 38, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, disclose the apparatus wherein the suggestion database processor is configured to modify the first set of search request criteria by appending the produced list of keywords to the first set of search request criteria (column 32, lines 47-67, Hendricks).

**8. Claims 2-3, 5-11, 22-23, and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional November 16, 2000, further in view of Hendricks (US Patent No.**

**5,798,785) filed December 2, 1993, and further in view of Cappi (US Patent Application No. 20020038308) filed May 27, 1999.**

Regarding Claims 2 and 22, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, disclose the apparatus wherein each metadata element comprises one or more metadata fields (Fig.3, Balogh), and wherein the suggestion keyword indexer, comprises:

an extraction module configured to extract and cache a value of each metadata field (column 9, lines 25-33, Dudkiewicz);  
a parsing module communicatively coupled to the extraction module and configured to parse contents of uniquely identifying metadata fields (column 9, lines 1-8 and column 10, lines 46-55, Dudkiewicz), wherein the contents of a uniquely identifying field comprises one or more word items (column 12, lines 33-37, Balogh);

a classifying module communicatively coupled to the parsing module and configured to classify one or more of the one or more word items (column 11, lines 11-39, Dudkiewicz); and

a comparison module communicatively coupled to the classifying module and configured to compare one or more of the one or more word items to determine a list of related terms (columns 11-12, lines 40-67 and 1-8, respectively, Dudkiewicz). However, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, are not as detailed with respect to an

index matrix record builder configured to create and augment an index matrix record for each of the classified word items. On the other hand, Cappi discloses an index matrix record builder configured to create and augment an index matrix record for each of the classified word items ([0058-0059], lines 1-6 and 1-10, respectively, Cappi). Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, are analogous art because they are from the same field of endeavor of database integration. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Cappi's teachings into the Balogh in view of Dudkiewicz, further in view of Hendricks, system. A skilled artisan would have been motivated to combine as suggested by Cappi at [0009], lines 1-15, in order to logically integrating databases onto a global data dictionary so a user can conduct searches and retrieve data that corresponds to a data element needed. As a result, providing the most relevant information to the user first.

Regarding Claims 3 and 23, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus further comprising one or more of a dictionary database, a thesaurus database and a lexicon database ([0034], lines 1-9, Cappi), wherein the comparison module is configured to compare a word item to entries in one or more of the dictionary database, the thesaurus database and the lexicon database, and ([0042], lines 1-12, Cappi) wherein the list of related terms

includes one or more of a dictionary definition, lexicon data, and one or more synonyms ([0059-0062], lines 1-10, 1-6, 1-12, and 1-10, respectively, Cappi).

Regarding Claims 5 and 26, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus wherein the uniquely identifying fields comprise one or more of content type, content title, date of production, rating and parental notice information, performer, artist, writer, author, plot summary, keyword list, and textual content description (Fig.7; columns 10-11, lines 46-67 and 1-10, respectively, Dudkiewicz).

Regarding Claims 6 and 27, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus wherein the index matrix record builder comprises a vector assignment module that is configured to assign a word item vector value for a word item, wherein the word item vector value is a measure of similarity between a word item and a related term ([0103], lines 1-15, Cappi).

Regarding Claims 7 and 28, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus wherein the suggestion database processor, comprises:

a vector determination module configured to assign a search term suggestion vector range to one or more of the elements of the first set of search request criteria (columns 11-12, lines 65-67 and 1-8, Dudkiewicz); and

a vector value comparator configured to compare a vector value of a search term and the word item vector value to determine if the word item vector value falls within the suggestion vector range of the search term (column 12, lines 9-38, Dudkiewicz), wherein word items that fall within the suggestion vector range may be used to search for suggested content (column 16, lines 6-24, Dudkiewicz).

Regarding Claims 8 and 29, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus wherein the suggestion vector range is adjustable by a user of the apparatus (columns 14-15, lines 60-67 and 1-9, Balogh).

Regarding Claims 9, 30, and 31, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus further comprising a user-defined filter, the user-defined filter comprising:

a user history filter (column 17, lines 25-27, Dudkiewicz);  
a user profile filter (column 17, lines 19-25, Dudkiewicz); and

an approved content access filter, wherein the suggestion database processor is configured to process search results from the suggestion database using the user-defined filter to produce the list of suggested content (column 14, lines 8-17, Dudkiewicz).

Regarding Claims 10 and 32, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus further comprising a ranking module configured to rank content in the list of suggested content (columns 22-23, lines 65-67 and 1-16, Dudkiewicz).

Regarding Claims 11 and 33, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus wherein the ranking module is configured to rank the content according to one or more of a user historical analysis report and similarities to previously accessed content by the user (column 30, lines 24-55, Dudkiewicz).

Regarding Claim 37, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus wherein the suggestion keyword indexer comprises:

a record builder configured to generate records that associate a suggestion keyword with a metadata element (column 1, lines 57-64, Balogh)

and a vector quantity that indicates a degree of similarity between the suggestion keyword and the metadata element ([0096-0097], Cappi); and

wherein the suggestion database processor comprises: a comparator configured to compare the vector quantity associated with a suggestion keyword with a suggestion vector range, wherein the suggestion keywords whose vector quantities fall within the suggestion vector range are included in the produced list of keywords ([0103-0104], Cappi).

**9. Claims 4, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional November 16, 2000, further in view of Hendricks (US Patent No. 5,798,785) filed December 2, 1993, further in view of Cappi (US Patent Application No. 20020038308) filed May 27, 1999, and further in view of Karaali (US Patent No. 6,182,028) filed November 7, 1997.**

Regarding Claims 4, 24, and 25, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, disclose the apparatus wherein the classifying module comprises one or more computational linguistics tools (column 12, lines 57-64, Balogh), wherein the one or more computational linguistic tools are configured to determine part-of-speech data of a word item (column 8, lines 1-22, Balogh), and wherein the index matrix

record builder is configured to add the part-of-speech data to the index matrix record for the word item (column 6, lines 6-27, Balogh). However, the combination of Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi, are silent with respect to the linguistic tool including a rule-based part-of-speech tagging algorithm and a stochastic part-of-speech tagging algorithm. On the other hand, Karaali discloses the linguistic tool including a rule-based part-of-speech tagging algorithm and a stochastic part-of-speech tagging algorithm (column 3, lines 3-14, Karaali). Balogh in view of Dudkiewicz, further in view of Hendricks, further in view of Cappi, and further in view of Karaali are analogous art because they are from the same field of endeavor of relating part-of-speech. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Karaali's teachings into the Balogh in view of Dudkiewicz, further in view of Hendricks, and further in view of Cappi system. A skilled artisan would have been motivated to combine as suggested by Karaali at column 1, lines 11-21, in order to assign the correct part of speech to each word in a sentence, based on the word's usage. As a result, disclosing the accurate recognition of text.

### ***Response to Arguments***

Applicant's arguments with respect to the newly amended claims have been considered but are moot in view of the new ground(s) of rejection.

***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHELCIE DAYE whose telephone number is (571) 272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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